

REMARKS

Claims 11, 12, and 21 - 24 are pending. Claims 1 – 10 and 13 – 20 have been cancelled. Claims 11, 21, 22, and 24 have been amended. No new matter has been introduced. Applicant respectfully request reexamination and reconsideration.

In the December 13, 2006 Office Action, the Examiner rejected claims 1 – 24 under 35 U.S.C. § 102(b) as being anticipated by Japanese Patent JP-2000276172 to Masatsugu ("the Masatsugu reference"). This rejection is respectfully traversed in so far as it is applicable to the presently pending claims, i.e., claims 11, 12, and 21 - 24.

Claim 11, as amended, distinguishes over the Masatsugu reference. Claim 11, as amended, recites:

A musical tone reproducing apparatus that is provided in a portable terminal apparatus and connected through a bus to a system controller, and that carries out musical tone reproduction, the musical tone reproducing apparatus comprising:

a tone generator memory that has a first input terminal having a first bit width, a first output terminal having the first bit width, and a storage region constructed based on the first bit width, is capable of storing various data including tone color parameters, and is used for general purpose use;

a cache memory that has a second input terminal and a second output terminal having a second bit width larger than the first bit width;

a tone generator; and

a tone generator controlling device, wherein:

the system storage device stores beforehand one channel's worth of a plurality of tone color parameters to be used for generation of a predetermined tone color in units of a first bit width,

said tone generator memory is supplied at the first input terminal thereof with one channel's worth of the plurality of tone color parameters from the system storage device via the bus by a plurality of times of transfer under control of the system controller and stores therein the supplied tone color parameters,

when a tone color is to be changed, the one channel's worth of the plurality of tone color parameters that are read out from the first output terminal of said tone generator memory are sequentially transferred to the second input terminal of said cache memory and stored in said cache memory,

said tone generator controlling device supplies said tone generator with control data generated based on sequence data in a reproduction timing of the control data, and supplies said cache memory with a read request when the tone color is used,

said cache memory outputs the one channel's worth of the plurality of tone color parameters from the second output terminal thereof to said one generator by a one time transfer in accordance with the read request supplied from said tone generator controlling device, and

said tone generator reproduces a musical tone based on the one channel's worth of the plurality of tone color parameters and the control data.

The Masatsugu reference does not disclose, teach, or suggest the musical tone reproducing apparatus of claim 11, as amended. The Masatsugu reference discloses a musical tone generation apparatus in which waveform data relating to a sound generation instruction is read out from a waveform memory (128M-word) and transferred in units of block to a cache memory (4M-word). When used in a sound generation channel, the waveform data is transferred at high speed from the cache memory to a DSP. The Masatsugu reference discloses that the apparatus is designed to permit the data transfer speed from the waveform memory to the cache memory to be set at either high speed to low speed. (*Masatsugu, paragraphs [0019, 0064, 0077]*).

The Masatsugu reference discloses that the waveform data is in this way supplied at a high speed by utilizing just the waveform data stored in the cache memory so that the problem of a limit on the number of music sound generating channels due to delays in the transfer speed of the waveform memory is eliminated. (*Masatsugu, paragraph [0089]*). The Masatsugu reference has a waveform memory that is utilized for large-sized apparatuses such as a personal computer and an electronic musical instrument. Thus, the waveform memory can be utilized for storing only waveform data because there is ample room to have a memory that is utilized for a specific purpose.

This is not the same as a musical tone reproducing apparatus that is provided in a portable terminal apparatus and connected through a bus to a system controller, and that carries out musical tone reproduction, the musical tone reproducing apparatus including **a tone generator memory that has a first input terminal having a first bit width, a first output terminal having the first bit width, and a storage region**

constructed based on the first bit width, is capable of storing various data including tone color parameters, and is used for general purpose use. In contrast, the waveform memory of the Masatsugu reference is a storage device that is used exclusively for waveform data storage. Specifically, the Masatsugu reference waveform memory is not utilized for general purpose use and is used only for tone color parameters. This is significant because the utilization of a memory for both storing tone color parameters and general purpose use allows the reduction in cost, apparatus size, and power consumption. Accordingly, claim 11, as amended, distinguishes over the Masatsugu reference.

Claim 11 further distinguishes over the Masatsugu reference. The Masatsugu reference does not disclose a musical tone reproducing apparatus that is provided in a portable terminal apparatus and connected through a bus to a system controller, and that carries out musical tone reproduction, the musical tone reproducing apparatus including **said cache memory outputs the one channel's worth of the plurality of tone color parameters from the second output terminal thereof to said one generator by a one time transfer in accordance with the read request supplied from said tone generator controlling device.** The Masatsugu reference does not disclose the highlighted limitation regarding outputting the one channel's worth of the plurality of tone color parameters from the second output terminal thereof to said one generator by a one time transfer. Accordingly, claim 11, as amended, further distinguishes over the Masatsugu reference.

Independent claim 24, as amended, recites limitations similar to claim 11, as amended. Accordingly, claim 24, as amended, distinguishes over the Masatsugu

reference for reasons similar to those discussed above in regard to claim 11, as amended.

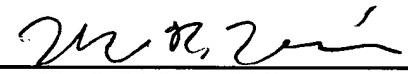
Claims 12 and 21 – 23 depend, indirectly or directly, on claim 11. Accordingly, claims 12 and 21 – 23 distinguish over the Masatsugu reference for the same reasons as those discussed above in regard to claim 11.

Applicant respectfully submits that all claims are in condition for allowance. If the Examiner has any questions, the Examiner is requested to call either of the undersigned attorneys at the Los Angeles telephone number (213) 488-7400 should the Examiner believe that such a telephone conference would advance prosecution of the application.

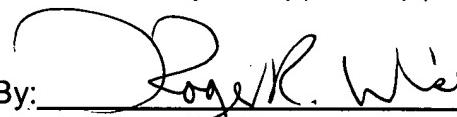
Respectfully submitted,

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